data cyborgs

Constructing Datafied Relations, Week 4

1) A look at the data

Birds, conflict zones and bodies

Waldrapp Project

- Tracking data collected via wearable devices
- Text corpi for different bird personalities
- Satellite images and weather data using bird GPS data
- Photos and posts collected via tracking app
- Geolocated Wikipedia articles

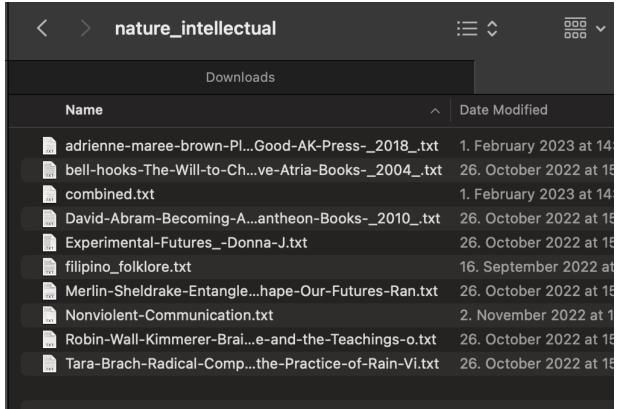
Tracker device data

	individual_id	individual_local_identifier	acceleration_raw_x	acceleration_raw_y	acceleration_raw_z	battery_charge_p
0	24795836	Jazu_020	147.0	-580.0	869.0	
1	24795836	Jazu_020	80.0	-736.0	751.0	
2	24795836	Jazu_020	122.0	-597.0	858.0	
3	24795836	Jazu_020	31.0	-664.0	800.0	
4	24795836	Jazu_020	72.0	-808.0	803.0	
5	24795836	Jazu_020	55.0	-591.0	883.0	
6	24795836	Jazu_020	133.0	-597.0	841.0	
7	24795836	Jazu_020	497.0	-300.0	965.0	
8	24795836	Jazu_020	461.0	-410.0	1380.0	
9	24795836	Jazu_020	279.0	-662.0	775.0	
10	24795836	Jazu_020	-43.0	-334.0	973.0	
11	24795836	Jazu_020	101.0	-513.0	883.0	
12	24795836	Jazu_020	-18.0	-696.0	817.0	
13	24795836	Jazu_020	551.0	-599.0	921.0	
14	24795836	Jazu_020	351.0	-566.0	816.0	
15	24795836	Jazu_020	105.0	-694.0	753.0	
16	24795836	Jazu_020	295.0	-618.0	798.0	
17	24795836	Jazu_020	235.0	-900.0	846.0	
18	24795836	Jazu_020	293.0	-397.0	757.0	



Text training data

Throwing it back to this time last year when I was frolicking in the flower fields in the good old days! Will life ever get back to normal? I still wake up in disbelief at w happening in the world 🐺 #Spring It's hard to know what to post while this is all going on. I'm a travel Instagrammer bu travel, so i'm enjoying going through all my old photo folders and editing those instea One thing this situation has taught me is don't take even the smallest things for grant I was to sit there and eat that breakfast next to a beautiful blue sea. To be honest, that moment for granted at the time as I eat breakfast in a lot of fancy hotels and inf beautiful views but I won't take that for granted ever again. Not now that the only time the house is to walk my dog down the road. #StayHome & #StaySafe guys! 💙 Oh Santorini, can't wait to see you again one day 💙 🚝 Reminiscing over old trips whil travel. I'm at home in England, where are you right now? Where is home for you? I love sleep because it's a time machine to breakfast! 🚳 Which one would you choose 1 Dreaming of Santorini... Have you had to cancel any travel plans or trips because of this Coronavirus? Stay safe Romantic dinner for one under the stars 👉 Just kidding @iamtravelr joined me after he (read: 100 photos) 😁 Throwing it back to last spring & simits in the city 🧼 #Istanbul #HurryUpSpring Pinky sunsets in Abu Dhabi 💞 Edited with @DeluxeFX app 🦙 S E Y C H E L L E S 🥂 Can't wait to head to warmer climates! The weather in England is ever - Rain, wind, storm, flood, repeat... 🙆 Best seat in the house #cappadocia Counting down the days until Summer in Santorini 💙 Who's coming to Greece this year? Love is all around, Happy Valentine's Day guys! 🎔 Photo by my love @iamtravelr Whizzing down slides at my dream house in the #Maldives 💙 Watch more sunsets 🌋 Edited with @DeluxeFX app #deluxefx Santorini dreaming ≠ ♥ Which place is on your bucket list to visit this year?



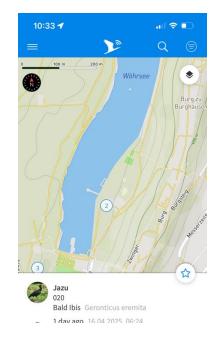


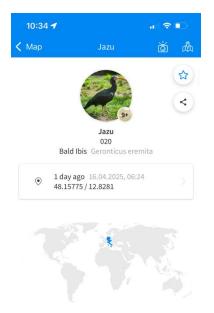
Today, the last remaining Northern Bald Ibises were captured in Salzburg and brought to safety before winter. Among them were Struppi and his friends, who only recently returned to Austria from their trip to Denmark.

Now we finally have the capacity to catch the young birds in the north. As most of them are not tagged and the birds are scattered in many different places, we are hoping for your support! In order to plan and carry out the trapping campaigns as efficiently as possible, we ask for concrete current sighting reports with exact location via WhatsApp to

Daniela Trobe 0043/660 14 27 204

Corinna Esterer 0043/660 50 33 511





Tracker App

The amazing journey of the young Nort

Anyone who has followed Knubbel's journey over the last two days probably knows what an incredible and amazing journey she has made!

Knubbel flew from Überlingen to Domat/Ems in mid-October together with her experienced conspecifics. Due to the onset of winter, we had to transfer the entire group within Switzerland and were able to release them in Locarno. From there, Knubbel followed the adults to Italy, but split off after a short time. On December 16, Knubbel suddenly took off to the southwest, turned around at sea and reached Corsica, where she spent the night.

The next day, however, Knubbel continued her journey and took off again to the southwest in the morning, heading straight for the Mediterranean. As she was still flying over the sea at nightfall, we feared the worst. Northern bald ibises only fly during the day when there is sufficient visibility. Knubbel was not far from Menorca, but had not yet reached the island. But it showed us once again what amazing feats Northern Bald lbises are capable of! Knubbel continued to fly after





12 months ago (20 Apr 2024 12:57 PM)

Ibis Jazu a Godega Sant Orbano (107-03-2024

Jazu has the ring number 020. The male Jazu was reared by his parents in Burghausen in 2011. He is the first bird from our colony which learned the route to the wintering area from a migrating bird. In 2012 he returned to his breeding area and led a juvenile back down to the wintering area. He showed, together with three other birds, the juveniles Luna, Francesco and Gustl the way down to Tuscany in 2013. In 2015 he was breeding for the first time. Together with Shorty he was raising two chicks successfully. He is part of the colony Burghausen and belongs to the generation F1. Project homepage: http://www.waldrapp.eu

Sightings

The following texts were submitted by users.
 Therefore some contents might not be translated.

5 months ago (27 Nov 2024 04:28 PM)



Mental Health and Breathing

- Interview, survey and web-scraped data about personal experiences with mental health struggles.
- Coco's diary entries.
- Coco's Oura ring (24/7) and ECG readings (during 30 min breathing exercises)

Mental Health Narratives

text	label
So the consideration is that I find solidarity, friendship very important. Of course, you can't have that with everyone, that's clear. So with my friend back then, I knew it would work out, and with Frank there now, of course I dic	0
"The number of hours is the same, but [] I could fill myself up with even more work if I wanted to, the basic structure doesn't change, but I can control it better, and the big difference is that I can cut myself off. So if I report	1
"That is actually a bit of the source of strength of the whole thing, that the family, I think, has moved closer together now with my problems, [] that I am also quite proud of my children, [] but who are now quite worried, my	1
"I think the acceptance or the appreciation of the profession was otherwise still another, so that is now in many ways already, I think that [] has also social causes, with certainty. I always say that there have never been as m	1
"So in the psychiatric ward it was like this, [] this boss was a disaster. He always looked for a victim in between, that was really the case, which then, yes, he was tortured. Then he had to somehow go down to the secretary	1
"That's the freedom to be able to decide for myself, within limits, how much I do, so by absenting myself, for example, and it's the opportunity to finally live here in this house together with my wife, the children are grown, but	1
"I was also always the mediator between the fronts, yes, between the chief and the senior physician, and, well, they sometimes didn't even talk to him anymore, and then they came to me, because I was also the first one the	1
"[] the relationship with my children has always been good, but that has become clearer to me, and also who from the circle of friends is a friend and who only values having contact with Frau Doktor."	1
"I like to work with the patients and I also have to say that, I don't get any praise from the chief physician side, nobody actually gets that, but I have feedback from colleagues and I also have good feedback from the patients	0
"So in principle, I actually make it very easy and simple for many people. And he actually made fun of it. So. And now I've been thinking, you really shouldn't make it too easy and too simple for others. Because that leads to t	1

body	Class
consistently constantly exhausted (especially pandemic) . returning work week absolutely exhausted . talking therapist sessions getting .	В
tips work ? simple pull . work home think easy slack people pleaser trying advance career hate disappointing asks .	
hi,	В
faang company year , feel like able contribute team / project . large infrastructure project insanely complicated , small code change massive effort mountain moving pieces .	
, code written structured , super hard wrap head going . spend days (weeks) studying sections code find assumptions wrong - conversations people senior .	
pretty task completed large " code study " involved . learning specific ways things said faang makes feel like working snails pace . junior engineer majority team senior . reason mentioned faang , mind , implies career growth	h
interactions teammates pleasant, bit annoyed '' code, able magically large changes / large projects good input / questions. reason specific said, way answer questions. ask x, works (based probably wrong assumptions)	s
looked posted issues / projects team , require plethora domain knowledge experience . easy moderate begin tackle pestering folks . looked changes juniors joined time making . projects looked defined scoped comparative	al;
talked manager mentioned anxieties , said thinks great job ramping , people passed team able literally , finishing accomplishment . browsed internal company job boards positions , feel like accomplished team impress man	18
feel downtrodden morning wake crack open lab , readying excruciatingly difficult debugging / code exploring . sure handle situation feel like failure feel like wasting away improving skills ; , time kicking feeling way lifetime open lab .	р
usually usually happens period depression bad eventually balances, swim shore feel better things time feel like. feel like fell slowly drowning getting harder harder swim. feel like barely keeping, barely write, brain feels like	D
lost ability hear read head ? talk head ? weird doctors depression lifts function comeback .	D
parents poor upset food costs resent hate money spend food general . burden want kms . today dad angry heard yelling mom said like " eat . let 70 lbs " absolutely terrible thing recovery multiple eating disorders (me	e D

Diary Entries

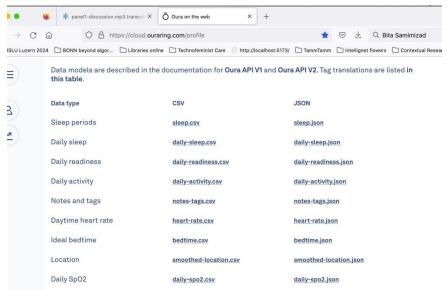
Diary data:

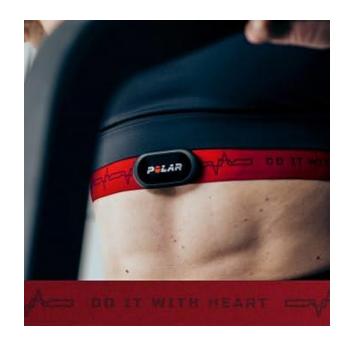
I am generally in a good shape, not super good, but ok, given the circumstances. I am traveling which means that I am usually getting less sleep and sleep is of lesser quality. But I am at a place where I feel comfortable and safe which is generally relaxing. I had a working session all day with a colleague which was inspiring and in a good atmosphere. This all adds to my recovery from a very tough time I had over the last weeks. I am basically in need of a holiday, and need to recharge my batteries. It feels like I am functioning, but everything is hard for me. The daily form of 82 does not reflect at all my exhaustion, but HRV on OURA is very low at 17.

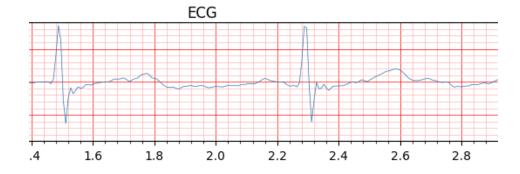
Biometric Data











VFRAME – Identifying illegal munitions

- Image and Video data posted on social media from conflict zones
- Satellite imagery (for verification)
- Synthetic data of 3D rendered scenes
- Synthetic data of 3D printed scenes

Real world data



ORIGINAL VIDEO



CONTENT-BASED SCENE SUMMARY

3d Rendered Data



3d Printed Data



2) Values and Data

Data Collection

- Creates/mediates a relationship between data emanator and data collector.
- What is the nature of the relationship?
 - Objectifying emanator(s) for control, manipulation, extraction, division?
 - E.g., work-tracking, algorithmic recs/echo chambers, profit off our data

Data Collection

Values, norms and power structures shape data collection

- What is measured is as important and what isn't.
 - GDP doesn't include environmental health, reproductive labor.
 - Measured = valued, Externality = devalued.
 - Gender still primarily treated as binary in data science, erasure of identities.
- BIRDS Core value of birds' well-being.
 - No biometric data to reduce burden. Adjusting machines after discovery of harm to eyes.
- BREATHING Self-optimization vs. Pranayama.
 - Inner friction/gear/Oura summaries can affect data. Diary/mood (externalities) initially decoupled from biometrics.
- VFRAME Relies on connectivity and social media platforms for data from conflict zones.
 - Actively suppressed by algorithms, governments, infrastructure attacks etc.
 - Only see what gets through. Most affected least likely to be seen?
 - Focus on "provable" war crimes.

Synthetic Data

- Emphasizes space between the world and the world represented in the data.
- VFRAME Real-world data very difficult to obtain, traumatizing. But synthetic limited to "easy" data/problems.
- Problems and unintended consequences:
 - ML-generated data tends towards greatest common denominator.
 - Synthetic data growing exponentially faster than real.





World-building with Data

- We can play with distributions, form of representation and synthetic data towards whatever kind of world we want the data to represent.
- This is done all the time by those with power.
 - Representation as purchase history/work hours.
 - Artificial increases in GDP.
 - Misinformation.
- Can we fight back with our own (data) worlds?





3:44 PM · Sep 9, 2024 · 87.5M Views

Half-Earth Project

Conserve half of the Earth's land and sea to protect biodiversity and reverse the species extinction crisis.

- Version 1: Completely separate from human civilization.
- Version 2: Integrated, informed by, e.g., tracking data.
 - Yukon-to-Yellowstone initiative
 - Proposes land bridges where territory crosses human inhabited zones.



3) Scraping Demo

Notebook for scraping comments from YouTube

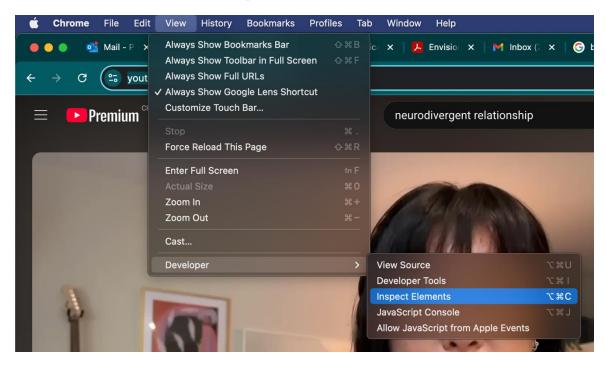
https://colab.research.google.com/drive/1DRCSrl1EGnIVZJWV6dTzP23V4DYAvv2L?usp=sharing

Selenium Web Scraper

- https://selenium-python.readthedocs.io/
- Selenium is a Python library used for automating web browsers to do a number of tasks like web scraping.
- It's not made to run on colab, but someone has created a library to make it work:

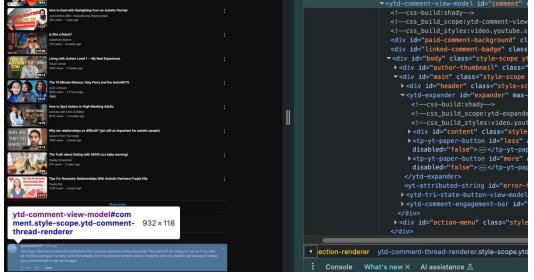
https://github.com/jpjacobpadilla/Google-Colab-Selenium

Inspecting Elements



To use Selenium, we specify conditions that isolate the elements we want.

The page is scrolled through automatically, and the parts matching our conditions are extracted.





Parliament of Things

4) Group Data Exercise

Activity 1 – Identify Stakeholders and Relations (10 mins)

The goal of this exercise is to choose a group of entities to incorporate as direct stakeholders in a potential data driven project.

1) As stakeholders, in addtion to yourselves, each group member picks one stakeholder category (e.g., Birds, Scientists, Bird Enthusiasts). It should be one they really care about and would like to be a representative for.

Try to include at least:

- A non-human entity
- A community
- 2) For each stakeholder, choose at least one important need or value and discuss how it could be affected by the other stakeholders.
- 3) Discuss any other important/interesting relations amongst them.

Activity 2 – Data (20 mins)

Now consider what sort of data might be interesting or relevant, particularly with respect to supporting the identified needs/values from Activity 1.

Each individual in the group represents the stakeholder they chose. That individual can use this time **to start**:

- Imagine ideal data
- Search/scrape the web/use APIs for relevant data
- Use tools of preference for creating synthetic data
- ... all related to the stakeholder they represent.

Treat as a group work session. Talk. Ask questions. Let the others know what you're doing.

It doesn't have to all fit together yet. This is just the beginning;)